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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,164	02/26/2004	Andrew Jay Bean	3638-115	9134
23117	7590	07/06/2005		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER CHIN SHUE, ALVIN C	
			ART UNIT 3634	PAPER NUMBER

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/786,164	Applicant(s) BEAN ET AL.	
	Examiner Alvin C. Chin-Shue	Art Unit 3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.26.04</u> <u>5.5.05</u> | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: ____ |
|---|--|

S.O. →

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4,5,13,14,16-18,20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed angles with respect to "gravity" are unclear.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,6-8,10,12,15,16 and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hornagold.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,4,5,9,11,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornagold. To use a single control switch to control his single motor means and to prevent the extension of the tower boom until it reaches a

predetermined angle as claimed would have been an obvious mechanical expediency.

Claims 3-5 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornagold in view of Smith, Jr. Hornagold teaches the claimed method and lift, but silent on the exact path of the nose pin. Smith teaches the movement of a boom nose pin following a path as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hornagold for his nose pin to follow a path, as taught by Smith, to enhance stability of his lift. To prevent the extension of the tower boom until it reaches a predetermined angle as claimed would have been an obvious mechanical expediency.

Claims 3-5,12-14,17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornagold in view of Kishi. Hornagold teaches the claimed method and lift with the exception of the sensor and silent on the exact path of the nose pin. Kishi teaches a sensor and the movement of a boom nose pin following a path as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hornagold to comprise a sensor and for his nose pin to follow a path, as taught by Kishi, to enhance stability of his lift. To

prevent the extension of the tower boom until it reaches a predetermined angle as claimed would have been an obvious mechanical expediency.

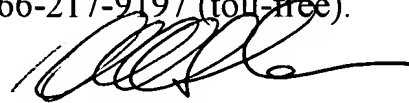
Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornagold and Kishi, as applied to claims 17 and 20 above, and further in view of Rocke. Rocke teaches rotation sensors between pivotally attached main boom 115 and a tower boom 110 and a rotation sensor attached between the tower boom to determine the angle of the tower boom 115, wherein a control system determine the angle of the main boom based on the output of the sensors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the booms of Hornagold to comprise sensors, as taught by Rocke, to determine the angle of the main boom.. To use a conventional inclinometer as a sensor for the inclination of the tower boom, in lieu of the angle sensor, as taught by Rocke, would have been an obvious mechanical expediency.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin C. Chin-Shue whose telephone number is 571-272-6828. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alvin C. Chin-Shue
Examiner
Art Unit 3634

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